TESTIMONY FROM NYCHA'S CHIEF COMPLIANCE OFFICER BRAD GREENBURG AIR QUALITY IN NYCHA APARTMENTS COMMITTEE ON PUBLIC HOUSING TUESDAY, FEBRUARY 28, 2023 – 1:00 PM CITY HALL COMMITTEE ROOM, NEW YORK, NY

Chair Alexa Avilés, members of the Committee on Public Housing, other distinguished members of the City Council, NYCHA residents, community advocates, and members of the public: good afternoon. I am Brad Greenburg, the Chief Compliance Officer at NYCHA. I am pleased to be joined by Daniel Greene, NYCHA's Senior Vice President for Healthy Homes; Joy Sinderbrand, Senior Vice President for Capital Programs; Josephine Bartlett, Senior Director of Pest Management; and other members of NYCHA's team. Thank you for this opportunity to discuss air quality in NYCHA apartments.

Improving residents' quality of life is at the heart of our mission at NYCHA. In the last few years, we have focused on building out programs that are helping to improve indoor air quality. Today, I'll discuss some of those programs and the changes we've made since we signed our Agreement with HUD, the U.S. Attorney's Office for the Southern District of New York, the EPA, and the City of New York. I also look forward to discussing with you where we must focus next and how we can work together to invest in NYCHA's apartments. I know all of us care deeply about the work we must do together to ensure NYCHA's apartments remain a source of stable, deeply affordable, and *healthy* housing for the hundreds of thousands of New Yorkers who call NYCHA home.

Addressing Critical Areas to Improve Residents' Quality of Life

As you know, NYCHA signed its Agreement with HUD in January 2019. The Agreement represented an inflection point in NYCHA's history and we need to get it right. The Agreement focuses on several critical "pillar" areas that most impact residents. Many of these areas were a focus of the Agreement because of their impact on indoor air quality and resident health. That includes mold and leaks, pests and waste management, and the investment of capital in heat systems and other areas that can make a difference for indoor air quality. I would like to highlight a few of the changes and investments we have made in the last few years to help improve indoor air quality.

I. Mold

Mold tends to grow in wet or damp places, and exposure to mold can cause allergic reactions or asthma. NYCHA, in collaboration with our Independent Data Analyst and Independent Mold Analyst and in accordance with our Mold Action Plan, has focused on a number of initiatives to help reduce mold growth in NYCHA apartments.

1. Ventilation - Clean Vents Initiative and Roof Fan Replacement Program

A key way that we are working to improve air quality and reduce the occurrence of mold is by enhancing and modernizing mechanical ventilation systems at our developments. To improve our ventilation systems, we had engineering firms proactively inspect our fans and then we installed oversized fans to ensure air can move more easily through lateral vents. We also launched the Clean Vents Initiative, where NYCHA staff use a HEPA vacuum to remove dust and debris that have built up in bathroom and kitchen vents over many decades. When we do this work, we measure airflow volume to ensure the upgrades are working.

This was a massive undertaking, launched during the pandemic, and we recently celebrated the completion of the roof fan portion of the project. Over the past two years, we replaced 6,188 roof fans across the Authority. Engineers determined that many of NYCHA's other roof fans – 2,248 in total – are modern and function effectively. Ensuring that roof fans are functioning properly provides better ventilation for residents and helps prevent humid, moist conditions that can give rise to mold.

New York City's Comptroller audited the roof fan program and found that NYCHA's Office of Mold Assessment and Remediation maintained adequate controls over the project, including by taking steps to combat delays, by using emergency contracts, by mobilizing an asbestos team, and by working with manufacturers to deliver thousands of rooftop fans. NYCHA's federal Monitor in a recent report also noted that with completion of the roof fan portion of the ventilation project "mold cases have been reduced significantly in the past year." These are steps in the right direction.

We also recently celebrated a milestone in our Clean Vents Initiative – we have cleaned vents in nearly 70,000 apartments across the city. Cleaning bathroom and kitchen vents dramatically improves ventilation and air circulation in apartments – by an average of 37 percent. We aim to finish this proactive effort to clean vents in all applicable apartments by the middle of this year. To date, the roof fan and vent-cleaning initiatives have helped improve the quality of life for about 85,000 NYCHA families.

2. Mold Busters

In the last few years, NYCHA also rolled out the Mold Busters initiative to ensure we properly inspect for mold and excessive moisture conditions using objective standards of measurement. Mold Busters involves enhanced tools, materials, and strategies, along with staff training and greater accountability through photo documentation and follow-up inspections. As part of Mold Busters, NYCHA staff must work through a set of tasks, from cleaning vents and repairing windows to remediating leaks and using mold-resistant paint, as part of a holistic approach to remediating mold in a resident's apartment.

We ensure compliance with this new business process through re-inspections by our Independent Mold Analyst and our Environmental Health & Safety Department and by using data tools developed by our Independent Data Analyst. We also focus now on completing the tasks identified in the unit during an inspection that we know will help address the health hazard in the more immediate term.

Our work to prevent and remediate mold is making a difference for residents. To date, our Office of Mold Assessment and Remediation, in collaboration with our Operations team, closed nearly 17,000 mold-cleaning and mold-resistant paint work orders as part of "Operation Mold Cleanup," which was launched in May 2022. We also created a team dedicated to cleaning up mold; it has completed about 2,300 mold-cleaning work orders to date. Since it was established last year, our Mold Inspection Initiative team has completed about 1,400 mold inspections at high-risk locations.

A key tool in fighting mold in the past year was the introduction of the Mold and Leaks Scorecard – a visual and assessment tool that rates the performance of every NYCHA development, providing us with a greater understanding of where we need to focus our Mold Busters-related resources.

We used the Mold and Leaks Scorecard to select developments with the most mold-related work orders for our Enhanced Oversight Program, creating performance milestones for these developments and providing staff training when necessary. As part of the Enhanced Oversight Program, we help close mold inspections, mold-cleaning work orders, tub enclosure replacement work orders, and other skilled trades work.

3. Capital Investment

Our Building Line Initiative is replacing entire plumbing systems in select building lines that are failing quickly, leading to leaks up and down the building line. This initiative helps to address mold while upgrading kitchens and bathrooms. Our Comprehensive Modernization program and our PACT program also include plumbing systems in the scope of work. Roofs and facades are also being addressed at some locations using these and other capital sources. But replacing our plumbing systems and addressing sources of moisture penetration through our roofs and facades across NYCHA's more than 2,000 buildings in the long term requires tens of billions of dollars and a real investment across the portfolio.

Let me emphasize this point: we have a short window to address NYCHA's plumbing and its physical infrastructure before the systems fail. Most of our buildings were constructed in the 1940s and 1950s and have not had their plumbing systems replaced since they were originally constructed. To prevent moist and damp conditions in NYCHA apartments, we need to invest significantly in the properties.

II. Pest and Waste Management

Like mold, managing pests in a way that protects residents' health is an important pillar of our Agreement with HUD. The Agreement focuses on the extermination of pests, including rats, mice, and cockroaches, which can be sources of indoor allergens. The Agreement also requires that we adopt Integrated Pest Management (IPM), an environmentally sensitive approach to extermination that ensures we are not impacting air quality with excessive spraying of pesticides.

NYCHA's Pest Control Department, in collaboration with the federal Monitor under our Pests and Waste Management Action Plan, has focused on a number of initiatives to help reduce pest populations in NYCHA apartments.

1. Integrated Pest Management

For instance, NYCHA has been changing its business process, using a new IPM Standard Procedure designed with the federal Monitor's expert entomologist, to emphasize a set of tasks that reduces indoor allergens while also getting at the root cause of pest infestations.

In accordance with IPM principles, NYCHA uses residual sprays less often and instead applies more gel in our pest treatments, benefitting residents' health. NYCHA's exterminators also use a HEPA vacuum to remove any roach shells or rodent droppings, which can impact respiratory conditions. And our exterminators use exclusion techniques to prevent entry by pests into the apartment in the long term.

As with the Mold Busters process, we built these steps into staff's handheld devices so that we can review compliance with these new requirements. And we launched several trainings for our exterminators and their supervisors on these new techniques. We also put in place an accountability structure to ensure compliance with these requirements on an ongoing basis. This includes the use of data tools, and also re-inspections and observations by our Quality Assurance Department, our Environmental Health and Safety Department, and the federal Monitor.

We expect that a continued focus on IPM principles will reduce the pest population over the long term. In 2022 we had almost 15 percent fewer verified pest complaints from residents compared to the year prior, a strong early indicator that IPM is working.

2. Pest Sensitive Population

The Agreement also requires that we provide an expedited response to pest conditions in households designated as "pest-sensitive." NYCHA now conducts outreach to residents so they know they can self-identify as a household where someone in the family has a respiratory illness,

immune deficiency or suppression, or someone's health is otherwise impacted by insects or rodents. We are using this information to prioritize pest inspection and treatment in these households. We use multiple sources of data to ensure we appropriately tag these units for expedited service.

III. Sustainability Initiatives

There are many other efforts underway that will help improve indoor air quality at NYCHA. Our range of sustainability initiatives not only help to improve service delivery and enhance the performance of building systems, but they also benefit the environment and provide residents and the community at large with a cleaner, healthier environment.

Our Agreement with HUD requires that we replace 500 boilers through both PACT and our capital program. At many sites, both our PACT partners and NYCHA Capital Projects team are leading projects that will help us move away from fossil fuel-powered heat and hot water systems, by deploying geothermal energy and electric heat pumps. Burning fossil fuels on our campuses contributes to greenhouse gas emissions that impact air quality.

Through the Clean Heat for All Challenge – a collaboration between NYCHA, the New York Power Authority, and the New York State Energy Research and Development Authority – an initial \$70 million investment will result in the development and production of 30,000 new heat pumps for NYCHA residents. This electric, efficient, easily installable technology will provide reliable heating and cooling for thousands of residents.

NYCHA has also been partnering with WE ACT for Environmental Justice, our nonprofit partner, to replace gas stoves, which studies show can impact indoor air quality. Soon, 1471 Watson Avenue will become the first NYCHA building to fully convert from gas to electric use when all residents' gas stoves are replaced with electric induction stoves.

We want to upgrade all our campuses with modern heating, cooling, and cooking systems. If we invest, we can move more of our buildings toward full electrification, installing new appliances and cleaner building systems.

IV. Ensuring Healthy Environments

I would like to mention some other initiatives that demonstrate our commitment to improving air quality in NYCHA apartments. The Smoke-Free NYCHA initiative promotes healthier homes for residents and healthier working environments for employees by reducing exposure to secondhand smoke and providing support and resources to residents and employees who want to quit smoking. In accordance with HUD regulations, smoking is prohibited inside NYCHA buildings and within 25 feet of NYCHA buildings. NYCHA's Smoke-Free team uses evidence-based methods to provide education on the harms of tobacco and exposure to secondhand smoke. Project staff includes the Smoke-Free NYCHA Liaison team of community health workers who provide strategic support at a borough level.

NYCHA's Health Initiatives team also recently launched the Healthy Start @ NYCHA program. This program provides supplies and assistance to expecting and pregnant residents, and, like pest-sensitive households, we tag these units to ensure we prioritize repairs that may impact the health of our future NYCHA residents.

V. Ensuring Healthy Homes

Ensuring that our developments are safe and healthy places for residents to live is our top priority at NYCHA. We believe that we are making progress across many of the areas that I discussed today, from pest management to mold remediation — areas that are critical to residents' quality of life. We know too that there is considerably more work still to do and more investment needed to ensure NYCHA's residents live in the high-quality, modern housing they deserve.

We appreciate your partnership as we continue working to promote healthy homes for NYCHA residents. We are happy to answer any questions you may have. Thank you.